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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,202	03/30/2004	Russell J. Dopke	220-318 / TEL0704-01	5125

832 7590 12/01/2005

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EXAMINER
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MCMAHON, MARGUERITE J

ART UNIT	PAPER NUMBER
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3747

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/813,202

Applicant(s)

DOPKE ET AL.

Examiner

Marguerite J. McMahon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

Claims 13-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/28/05.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grainger (3,990,421). Grainger shows a blower 92 (see Figures 8-13) generating an air stream, a pair of first and cylinder cylinders, an air intake system in fluid communication with said cylinders, an intake air heating arrangement comprising a heater box 93, 94 disposed proximate said first cylinder, an interior of the heater box in airflow communication with said air stream, a conduit 100, 97 in airflow communication with said heater box and with said air intake system whereby air from said air stream is heated within said heater box and is conducted through said conduit into said intake system of the engine, wherein said first and second cylinders are disposed at an angle with respect to one another to define a V-space therebetween, a carburetor 99 disposed within said V-space, an air cleaner 16 connected to the carburetor and in airflow communication with the conduit, wherein the heater box is

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connected to the first cylinder (indirectly), and the heater box is disposed externally of said V-space. Grainger shows everything except explicitly disclosing a horizontal crankshaft, with the blower being driven by the crankshaft. It would have been obvious to one of ordinary skill in the art to utilize a horizontal crankshaft, with the blower being driven by the crankshaft, as this is **the** most conventional type of engine arrangement.

Claims 6, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grainger (3,990,421) in view of Fischer (4,809,595). Grainger shows everything except the air stream being heated by heat from the muffler. Fischer teaches that it is old in the art to utilize a muffler 4 to heat the air stream flowing into the air intake. It would have been obvious to one having ordinary skill in the art to employ a muffler to heat the intake air in lieu of an exhaust manifold, since the two are art recognized alternatives, known for the same purpose.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grainger (3,990,421) in view of Hoppner et al (4,691,681). Grainger shows everything except a cylinder wrap at least partially enclosing the first cylinder and said cylinder wrap defining an air passage through which the air stream is conducted. Hoppner et al teach that it is old in the art to employ a cylinder wrap 10 at least partially enclosing the first cylinder 7, said cylinder wrap defining an air passage through which the air stream is conducted. It would have been obvious to one having ordinary skill in the art to modify Grainger by employing the cylinder wrap at least partially enclosing the first cylinder, said cylinder wrap defining an air passage through which the air stream is conducted on its way to the heater box, in order to provide additional heating to the intake air stream.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the intake air heating devices of Henriksson et al (4,716,860), Zimmermann et al (6,779,514), and Nara et al (6,807,954), which all employ a cylinder wrap enclosing a cylinder with an air path through which an air stream is conducted in order to heat the intake air; the intake air heating devices of Reddekopp (4,103,656) and Andersson et al (6,615,790) which both utilize a muffler to provide heat to the intake air stream, and Sarto et al (3,500,806) which shows an exhaust gas heated intake air in an engine with a conventional horizontal crankshaft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marguerite J. McMahon whose telephone number is 571-272-4848. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on 703-308-1946. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**MARGUERITE MCMAHON**  
**PRIMARY EXAMINER**